ABSTRACT OF THE DISCLOSURE

Methods and devices are provided for reducing the concentration of low molecular weight compounds in a biological composition, while substantially maintaining a desired biological activity of the biological composition. The device comprises highly porous adsorbent particles, and the adsorbent particles are immobilized by an inert matrix. The matrix containing the particles is contained in a housing, and the particles range in diameter from about $1\mu m$ to about 200 μm . The matrix can be fibrous, and the particles can have a surface area greater than 750 m^2/g and a pore diameter between about 25 and 800 Å. The device can be used to adsorb and remove a pathogen-inactivating compound that is a nucleic acid-binding compound such as psoralen, an acridine derivative or a dye from a biological composition such as a blood product.